UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/564,211	07/25/2006	Johann Arnold	2003P05103WOUS	7536

22116   7590   12/05/2008
SIEMENS CORPORATION
INTELLECTUAL PROPERTY DEPARTMENT
170 WOOD AVENUE SOUTH
ISELIN, NJ 08830

EXAMINER
ABDALLA, KHALID M

ART UNIT	PAPER NUMBER
4173	

MAIL DATE	DELIVERY MODE
12/05/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>01/09/2006</u>.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>8-13</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>8-13</u> is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on <u>09 January 2006</u> is/are: a)☒ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date <u>07/23/2007 AND 01/09/2006</u>.

4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____ .

DETAILED ACTION

1. This application has been examined .Claims 8-13 are pending in this

   application

Information Disclosure Statement

2. The Examiner has considered the references listed on the Information

   Disclosure statement submitted on 12/14/2005 (see attached PTO-1449.

Drawings

3. The examiner contends that the drawings submitted on 12/14/2005 are

   acceptable for examination proceedings.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

   obviousness rejections set forth in this Office action:

   > (a) A patent may not be obtained though the invention is not identically disclosed or described as set
   > forth in section 102 of this title, if the differences between the subject matter sought to be patented and
   > the prior art are such that the subject matter as a whole would have been obvious at the time the
   > invention was made to a person having ordinary skill in the art to which said subject matter pertains.
   > Patentability shall not be negatived by the manner in which the invention was made.

5. Claims 8-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over

   Chen et al (us 2003/0200321A1) in view of Weinstein et al (us 2002/0191572

   A1).

Regarding claim 8, Chen discloses An arrangement for securing data access (secure link to a VPN gateway see abstract) of a first subscriber or a plurality of first subscribers arranged in a first sub-network of an automation network (see FIG 1 ,plurality of subscribers 'client # 104-110' configured on the sub network # 101 and see automated configuration and setup [0022]) to a second subscriber or a plurality of second subscribers arranged in a second sub-network of the automation network, the arrangement comprising at least one secure-switch connected upstream of the first subscriber or the plurality of first subscribers for establishing a tunnel to the second subscriber or the plurality of second subscribers, the tunnel configured (tunnel configuration see [0099] and [0024]) to securely transmit data via an insecure network (secure tunnels through untrusted (non- secure) networks see [0066] also see abstract).

Chen does not discloses the secure-switch is an Ethernet switch and at least one port of the tunnel is a layer-3- port for establishing a tunnel end point in accordance with the IPSec-protocol, and the secure switch is configured to establish the tunnel representative for the first subscriber or the plurality Of first the and to allocate the tunnel to the first subscriber or the plurality Of first subscribers using a subscriber address of the first subscriber or the plurality of first subscribers.

However Weinstein teaches the secure-switch is an Ethernet switch (the virtual operator in the switched Ethernet [0083] and at least one port of the tunnel is a layer-3- port for establishing a tunnel end point (Label Switched Paths (LSP). Before a packet gets into an MPLS domain, a label stack is inserted before its

network layer header to serve as a local identifier for an LSP. MPLS routers are

called Label Switching Routers (LSR)see[0066], in accordance with the Ipsec-

protocol , and the secure switch is configured to establish the tunnel

representative for the first subscriber or the plurality Of first the and to allocate

the tunnel (MPLS paths or tunnels see [0077] to the first subscriber or the

plurality Of first subscribers using a subscriber address of the first subscriber or

the plurality of first subscribers (The Ethernet switches implement the MPLS

paths see [0077] also see [0097]). Thus it would have been obvious to one of

ordinary skill in the art at the time the invention was made to use and modify the

arrangement of Chen and couple with both ethernet switch and label switch

paths taught by Weinstein in order to provide secure paths for data transmission.

Regarding claim 9, note that Chen discloses the arrangement, further

comprising a configuration tool for configuring the automation network (see FIG 1

,plurality of subscribers 'client # 104-110' configured on the sub network # 101

and see automated configuration and setup [0022]) an, the configuration tool

configured to generate parameter data related to the secure-switch and to

automatically variety of servers , dedicated processors transmit the generated

data to the secure-switch (secure data transfer see [0025].

Regarding claim 10, note that Weinstein teaches the arrangement,

wherein the secure-switch (Ethernet switch the core of each PAMLAN see

[0057]) comprises at least one port configured as a WLAN end point (public

access mobility LAN and air interface see abstract) for establishing a tunnel end point.

Regarding claim 11, note that Weinstein teaches the arrangement , Wherein the secure-switch comprises at least one port configured to be used as a tunnel end point (subscriber see [0097]), at least one point having a marker (IPsec authentication header generate a codeword over the whole packet [0097]).

Regarding claim 12, note that Weinstein teaches the arrangement, wherein the marker is switchable (IPsec authentication header generate a codeword over the whole packet [0097] also see FIG 8A and FIG 8B)

Regarding 13, Chen discloses a secure-switch for securing data access (secure link to a VPN gateway see abstract also see secure data transfer [0025].) of a first subscriber or a plurality of first subscribers arranged in a first sub-network of an automation network to a second subscriber or a plurality of second subscribers arranged in a second sub-network of the automation network (see FIG 1 ,plurality of subscribers 'client # 104-110' configured on the sub network # 101 and see automated configuration and setup [0022]) wherein the secure switch is configured to be connected upstream of the first subscriber or the plurality of first subscribers and

Chen does not explicitly discloses the secure switch is an Ethernet switch having

at least one port embodied as a layer-3- port for establishing a tunnel end point in

accordance with the IPSec protocol. The secure switch comprising

 a Secure Channel Converter for establishing a tunnel to the second subscriber

or the plurality ~of second subscribers, the tunnel configured to securely transmit

data via an insecure network, wherein the Secure Channel Converter is

configured to establish the tunnel representative for the first subscriber or the

plurality of first subscribers and to allocate the tunnel to the first subscriber or the

plurality of first subscribers using a subscriber address of the first subscriber or

the plurality of first subscribers.

However Weinstein teaches the secure switch is an Ethernet switch (the virtual

operator in the switched Ethernet [0083] having at least one port embodied as a

layer-3- port for establishing a tunnel end point (Label Switched Paths (LSP).

Before a packet gets into an MPLS domain, a label stack is inserted before its

network layer header to serve as a local identifier for an LSP. MPLS routers are

called Label Switching Routers (LSR) see [0066] in accordance with the IPSec

protocol. the secure switch comprising

 A Secure Channel Converter for establishing a tunnel to the second subscriber

or the plurality ~of second subscribers(The Ethernet switches implement the

MPLS paths see [0077] also see [0097]). the tunnel configured to securely

transmit data via an insecure network (secure connection and secure-per packet

authentication see [0012] and [0097], wherein the Secure Channel (public key

base secure channel see [0088] Converter is configured to establish the tunnel

representative for the first subscriber or the plurality of first subscribers and to

allocate the tunnel (MPLS paths or tunnels see [0077] to the first subscriber or the plurality of first subscribers using a subscriber address of the first subscriber or the plurality of first subscribers (The Ethernet switches implement the MPLS paths see [0077] also see [0097]). Thus it would have been obvious to one of ordinary skill in the art at the time the invention was made to use and modify the arrangement of Chen and couple with secure connection, secure per packet and the public key base channel taught by Weinstein to build up a secure reliable network to transmit data.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to KHALID ABDALLA whose telephone number is (571)270-7526. The examiner can normally be reached on MONDAY THROUGH EVERY OTHER FRIDAY 7 AM TO 5 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, JINHEE LEE can be reached on 571-272-1977. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/K. A./
Examiner, Art Unit 4173

/Yemane Mesfin/
Examiner, Art Unit 2444